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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,429	02/17/2004	Lawrence Germano Ponsi	920229-902699	1562

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EXAMINER	
SHAPIRO, JEFFERY A	

ART UNIT	PAPER NUMBER
3653	

NOTIFICATION DATE	DELIVERY MODE
12/31/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patent-ch@btlaw.com

Office Action Summary	Application No.	Applicant(s)	
	10/780,429	PONSI ET AL.	
	Examiner	Art Unit	
	Jeffrey A. Shapiro	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 2-6, 9, 11-15, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dearing (US 2002/0183882) in view of Bastian, II et al (US 6,650,225 B2).

As recited in Claim 1, Dearing discloses a cabinet (230) having at least one compartments (see figure 6 and paragraph 45, first five lines), a sensor for each product compartment (262-267), as shown in figures 6 and 10 and a processor (256) connected to each sensor.

Dearing further discloses an aging indicator, at paragraph 57, which indicates that an expiration message is sent to the micro-warehouse (MW 36) system (25), which is a controller/server. See paragraph 40. Each micro-warehouse is represented as a "client" on server (27), said server handling multiple clients/MW's. See paragraph 44, last 5 lines and paragraph 45, first 5 lines. Since each MW is construed as a single compartment, and each MW is disclosed as having a separate aging indicator, Dearing is therefore considered to meet Applicant's limitation of a "separate aging indicator associated with each product compartment". Multiple signals are transmitted concerning the condition of the items located in the MW, which can be a freezer, refrigerator, or other storage device. Each of the processors can monitor the status of each item concerning data such as temperature.

Note that it would have been obvious to include a temperature controller in Dearing's apparatus since Dearing discloses monitoring temperature in paragraph 40, lines 5 and 6.

Regarding the phrase "while the product remains in said product compartment", added to the independent claims, such as Claim 1, note that Dearing's device monitors and senses the presence of the product while it is in Dearing's compartment.

Dearing does not expressly disclose, but Bastian discloses a display (101), illustrated at figure 7, located at each product compartment/bay.

Regarding Claims 1, 4, 11 and 19, Dearing does not expressly disclose, but Bastian discloses using one or several indicators to depict one or several states or

conditions of an item. See Bastian, col. 12, lines 3-10, which mentions that indicator light (80) can have multiple LEDs of the same or different colors.

At the time of the invention, it would have been obvious to use one LED with multiple colors or three or more LEDs of different colors in order to convey appropriate information about the aging of the items inside Dearing's compartments, as taught by Bastian. For example, one ordinarily skilled would have found it logical to use a green, yellow and red indication, wherein green is considered ok or before expiration, yellow is considered caution or getting close to expiration and red is considered expired or over-aged.

Regarding Claim 14, note that Bastian teaches using various visual indicators, for example, in figures 2e and 7. See also col. 5, line 42-col. 6, line 54 of Bastian. Col. 6, lines 41-54 discuss a configuration in which two displays which display different information, which can be construed as indicators, is displayed. Additionally, figure 2e illustrates indicator light (33) which is a third indicator/display of information. Note that figures 2f and 2g and col. 6, line 61-col. 7, line 9 illustrate and discuss display panel (35f) which can incorporate information from any light indicators, thereby supplanting them.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have located a display/indicator at each compartment/bay of Dearing's microwarehouse, and to have used a combination of three light indicators/displays or a functional equivalent thereof.

The suggestion/motivation would have been to indicate information about a particular bay to an operator of the microwarehouse. See Bastian abstract as well as col. 5, line 42-col. 6, line 54, col. 6, lines 41-54, figures 2f and 2g and col. 6, line 61-col. 7, line.

Regarding Claims 14 and 15, note that it is considered to be expedient for one ordinarily skilled in the art to have three separate displays/indicators to display separate information such as "not ready", "ready" and "select first" indicators. Bastian provides teaching, as cited above, concerning the use of several indicators and displays to communicate several pieces of information about the bay they are associated with.

Regarding Claims 2, 3, 12 and 13, Dearing describes the product storing and dispensing system described above. Dearing does not expressly disclose that the processors are optical or infrared based. However, Dearing does teach the use of various sensors, such as proximity sensor (40) or light curtains. Official notice is taken that optical and infrared detectors are considered to be functional equivalents of each other that one ordinarily skilled in the art would have found obvious to use to sense the presence of a product in a compartment, depending upon the requirements of the application. For example, infrared sensors are used where lighting conditions are low or where it is desired to also detect heat, whereas optical sensors might be used where heat is low or non-existant. Also, Dearing at paragraph 5, lines 7-10 describes use of RF tags having a frequency between the audible and infrared range. Therefore, it

would have been obvious to use sensors based on any particular radiation-optical, radio, or infrared as functional equivalents of each other.

4. Claims 7-9, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dearing in view of Bastian, and further in view of Chen (US 6,930,296 B2). Dearing discloses the system described above. Dearing does not expressly disclose, but Chen discloses heating means (30) for heating items.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have located a display at each compartment/bay of Dearing's microwarehouse.

The suggestion/motivation would have been to indicate information about a particular bay to an operator of the microwarehouse. See Bastian abstract, for example.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dearing in view of Bastian and further in view of Black, Sr. et al (US 5,522,310). Dearing discloses the system described above. Dearing does not expressly disclose, but Black discloses a thermocouple (20) for determining temperature in a freezer. Said thermocouple is also taught as being used to gather data to determine product spoilage. See col. 5, lines 46-65 and col. 12, lines 60-64.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have used a thermocouple to detect temperature in a product bay of Dearing's

product storage area, since Dearing discusses use of a temperature sensor at paragraph 40, line 6, and a thermocouple is just such a temperature sensor.

Response to Arguments

6. Applicant's arguments filed 10/10/07 have been fully considered but they are not persuasive. Applicant asserts that Applicant's independent claims do not read on Dearing's apparatus because it allegedly does not have a single aging indicator "proximate each product compartment as well as a "proximity sensor for each product compartment for sensing the presence of a product while the product remains in said product compartment."

However, Dearing discloses a proximity sensor in the form of antennae (261-267). The matter of what is a single compartment is an arbitrary and relative designation depending on what is construed as a single compartment. For example, Dearing's entire refrigerator warehouse, as illustrated in figure 6, could be construed as a single compartment. However, there are other compartments (234, 238, 240, 242 and 244) which can all be construed as individual compartments. In other words, one compartment can be construed as four, eight or sixteen compartments (242) or a single compartment (244). Even if one construes the entire microwarehouse (230) as a single compartment, and one set of RFID antennae disposed in the door as a single proximity detector. Further, Dearing discloses many microwarehouses connected by an information network. Therefore, it can be construed that Dearing discloses one proximity sensor for each compartment.

Regarding whether the product is identified directly or not, note that Dearing discloses products as having rfid devices incorporated into the products and are thus part of the products themselves. See figure 13 and paragraph 13 of Dearing. Therefore, when the antennae senses the rfid device, the products are thus sensed.

Note also that Bastian discloses a proximity sensor in col. 7, lines 57-67, col. 8, lines 37-43 for sensing a hand picking an item. Bastian also discloses that light indicator (80) can "comprise multiple LEDs of the same or different colors" at col. 12, lines 3-11. Note also that Dearing discloses a proximity sensor (40) at paragraph 46. Note in paragraph 57 that aging is sensed in various ways. For example, the amount of time a product spends on the shelf as well as at what temperature is recorded. An expiration date based on shelf life or acceptable usable life or a calculated storage degree day value for each product can be used to determine if a product has expired or not.

Thus. one ordinarily skilled in the art would recognize that there are four possible states of a product with regards to a particular expiration limit. Thee of these are less than the limit, equal to the limit or past the limit. A fourth one might be a band of time close to but before the limit. Thus, as there are four possible states, it would have been obvious in light of Bastion's teaching of using an LED indicator with multiple colors to base four distinct colors based on any of the four states possible, since these possible states are finite in number and can be reasonably corresponded with an equal number of distinct colors in an indicator.

Regarding a proximity sensor, although an RFID reading device in the form of an antenna may be called a proximity sensor, in the alternative, it would have been obvious to use proximity sensors in addition to the rfid sensors as a check on whether an RFID device is being detected. Additionally, note that it would have been obvious to one of ordinarily skilled to replace rfid devices with proximity switches for the purpose of simplifying Dearing's system.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Shapiro whose telephone number is (571)272-6943. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JAS

December 25, 2007

SAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER